

## § 213.51

## 49 CFR Ch. II (10–1–09 Edition)

(1) Along the right-of-way, and  
(2) At highway-rail crossings; (This paragraph (b)(2) is applicable September 21, 1999.)

(c) Interfere with railroad employees performing normal trackside duties;

(d) Prevent proper functioning of signal and communication lines; or

(e) Prevent railroad employees from visually inspecting moving equipment from their normal duty stations.

### Subpart C—Track Geometry

#### § 213.51 Scope.

This subpart prescribes requirements for the gage, alignment, and surface of track, and the elevation of outer rails and speed limitations for curved track.

#### § 213.53 Gage.

(a) Gage is measured between the heads of the rails at right-angles to the rails in a plane five-eighths of an inch below the top of the rail head.

(b) Gage shall be within the limits prescribed in the following table—

Class of track	The gage must be at least—	But not more than—
Excepted track .....	N/A .....	4'10¼".
Class 1 track .....	4'8" .....	4'10".
Class 2 and 3 track .....	4'8" .....	4'9¾".
Class 4 and 5 track .....	4'8" .....	4'9½".

#### § 213.55 Alinement.

Alinement may not deviate from uniformity more than the amount prescribed in the following table:

Class of track	Tangent track	Curved track	
	The deviation of the mid-offset from a 62-foot line <sup>1</sup> may not be more than— (inches)	The deviation of the mid-ordinate from a 31-foot chord <sup>2</sup> may not be more than— (inches)	The deviation of the mid-ordinate from a 62-foot chord <sup>2</sup> may not be more than— (inches)
Class 1 track .....	5	<sup>3</sup> N/A	5
Class 2 track .....	3	<sup>3</sup> N/A	3
Class 3 track .....	1¾	1¼	1¾
Class 4 track .....	1½	1	1½
Class 5 track .....	¾	½	⅝

<sup>1</sup> The ends of the line shall be at points on the gage side of the line rail, five-eighths of an inch below the top of the railhead. Either rail may be used as the line rail, however, the same rail shall be used for the full length of that tangential segment of track.

<sup>2</sup> The ends of the chord shall be at points on the gage side of the outer rail, five-eighths of an inch below the top of the railhead.

<sup>3</sup> N/A—Not Applicable.

#### § 213.57 Curves; elevation and speed limitations.

(a) The maximum crosslevel on the outside rail of a curve may not be more than 8 inches on track Classes 1 and 2 and 7 inches on Classes 3 through 5. Except as provided in § 213.63, the outside rail of a curve may not be lower than the inside rail. (The first sentence of paragraph (a) is applicable September 21, 1999.)

(b)(1) The maximum allowable operating speed for each curve is determined by the following formula—

$$V_{\max} = \sqrt{\frac{E_a + 3}{0.0007D}}$$

Where—

$V_{\max}$  = Maximum allowable operating speed (miles per hour).